A CASE OF TUMOR AT THE BASE OF THE BRAIN IN THE PONTINE REGION.[1]

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The patient from whom this specimen was obtained had the following history: A. T., female, aged 48, had good personal and family antecedents. About January, 1898, she began to have nausea, vomiting, and vertigo, without known cause. One day the vertigo became so intense that the patient fell from her chair, after which she noted diplopia with strabismus. Then began failing vision in the left eye. There was a history also of headache in varying intensity, and of inco-ordination of gait, so that she required to be assisted in walking.

On admission to the hospital, in March, 1898, the patient presented the following symptoms: Her gait was ataxic in character, and she had a tendency to sway and pitch to one side; this was not, however, a typical forced movement. The left eye presented slight paresis of the external rectus muscle, and the patient could not close this eye as firmly as its fellow (combined involvement of the sixth and seventh nerves). There was no hemiplegia or other paralysis, nor any involvement of sensation at this time. The hearing in the left ear was impaired. Dr. Oliver found paresis of *both* external recti, more marked on the left side; also, marked neuro-retinitis, with numerous hemorrhages in both neural and retinal tissues.

The further progress of the case was marked by increasing paralysis of both sixth nerves and of the left seventh nerve. Hearing in the left ear gradually failed, until there was complete loss of power in the left eighth nerve. The optic neuritis progressed until it caused total blindness in both eyes. The third and fifth nerves never became involved. There was never any loss of power in the arms or legs, showing that the motor tracts in the pons and medulla were not involved. Neither was there any loss of sensation in any region of the body. The progress of the case was slow and long-continued. The affection of the gait became so great that the patient was soon confined to bed. She lived for more than one year, dying eventually of exhaustion. Towards the end she was in a stuporous condition most of the time, from which she could be only partially aroused.

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[1] Paper read and specimen presented at the annual meeting of the American Neurological Association, Atlantic City, June 14 and 15, 1899.

A diagnosis of tumor of the pontine region was made. The involvement of both sixth nerves and the left seventh and eighth nerves, without implication of the motor or sensory tracts within the pons, indicated that the growth was on the outside of the pons, where is was found after death.

AUTOPSY.

Brain: Scalp and calvarium presented nothing abnormal. Dura was not especially adherent. No excess of fluid in subarachnoidal space. Small vessels of pia were injected; large vessels distended. Pia was transparent everywhere. Brain was flattened in vertical axis. Springing from the sulcus between the pons and cerebellum was a cone-shaped tumor, the apex of which projected forward to a point slightly anterior to the middle line of pons and reached to within 15 mm. of the origin of left crus cerebri. The apex of the tumor was rounded and shaped like a nipple. The base of the tumor was a little anterior to the middle of the left cerebellar hemisphere.

The tumor, which was about the size of a small hen's egg, was 3 cm. wide at its base. Its total length was 5.5 cm. Its greatest thickness was 3.3 cm. Laterally, toward the median line, the tumor pressed upon the medulla and the posterior part of the pons on the left side. The medulla was twisted in its longitudinal axis, and was directed at an angle of 45 degrees away from the median line, so that its left lateral aspect was turned obliquely upward, and in addition, was flattened from side to side. The tumor was sharply circumscribed, and could be shelled out from the cerebellum. It was covered by the pia in its posterior aspect, and possibly also anteriorly. It had an irregular, convoluted surface, and resembled brain tissue in appearance, and was firm in consistence. On section, the growth had a yellowish-red appearance, but here and there was marked by distended vessels and small hemorrhages. The seventh and eighth nerves on the right side were distinct. On the left side, in the region of the tumor, they were indistinct. There was marked softening of the pons, where the tumor infringed upon it, and for about 2 cm. forward.

Base of Skull: Tumor was adherent. Posterior part of petrous portions of temporal bone was eroded. The eroded cavity was 2 cm. (long) x 1 cm. (high) x 1 cm. deep. Central part of excavation corresponds to the position of the internal meatus. Bone was rough. Sharp ridges passed across bottom. Merely a shell of bone was left anteriorly. Cavity was filled with soft, red tumor tissue.